

Flight Procedures Cover Page	Task Action: FLIGHT CHECK	Task Type: STAR	Estimated Chart Date: 11/05/2020	APWS Task ID: F219E5F71EC945C1B72F8A7E37FEE0B6	APWS Project ID: 87B2DE1177444AB98F2BA85E29457D34
Procedure: STAR TRTLL (RNAV) SIX CHICAGO IL KORD		Enroute: YES	Specialist: Powell, Dan		Agreement Number:
Airport ID: KORD	Airport Name: CHICAGO O'HARE INTL		Airport City: CHICAGO		State: IL
Facility ID:	Facility Type:	Flight Inspection Remark Type: New FC Slot			
<div>Procedure Comments: PBN RNAV STARS-NEW RWY 9C/27C BEING COMMISSIONED.</div> <div>LOA: NO TERMINUS ALTITUDE</div> <div>CONTACT: ROB HAMILTON, AJV-A440 LEAD, 405-954-4608</div> <div>THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 04/02/2020: 1. ADDED PROCEDURAL DATA NOTE FOR SPECIFIC TO PNTAC TRANSITION.</div> <div>06/17/2020</div>					



## FIPC DME/DME FORM

<b>PROCEDURE:</b> STAR TRTLL (RNAV) SIX CHICAGO IL KORD		<b>AIRPORT NAME:</b> CHICAGO O'HARE INTL		<b>AIRPORT ID:</b> KORD	<b>SPECIAL CONTROL NO:</b> BG-07-138-20
<b>FAC ID:</b> TRTLL6		<b>CITY:</b> CHICAGO		<b>ST:</b> IL	<b>ORIG CHART DATE:</b> 11/05/2020
<b>DFL TYPE:</b> PROC/D	<b>THIRD PARTY:</b> <input type="checkbox"/> YES	<b>EST. TIME ON SITE:</b> 1.0	<b>REIMB. NUMBER:</b>	<b>PTS TASK ID:</b>	

## PREFLIGHT NOTES

<b>REVIEWER:</b> scott wiebe	<b>DATE:</b> 08/31/2020			
<b>COMMENTS:</b>	<b>CHECK ONE:</b> <input checked="" type="checkbox"/> FLT CK REQ <input type="checkbox"/> NFCR <input type="checkbox"/> REJECT			
	<table><tr><td></td><td><b>YES</b></td><td><b>NO</b></td></tr></table>		<b>YES</b>	<b>NO</b>
		<b>YES</b>	<b>NO</b>	
<b>CPV COMPLETE?</b>	<b>X</b>			

## PROCEDURE RESULTS

<b>INSPECTION DATE:</b> 08/30/2020	<b>CREW #:</b> VN219	<b>N #:</b> N77	<b>INSTRUMENT PROCEDURE STATUS:</b> <input checked="" type="checkbox"/> SAT <input type="checkbox"/> SAT W/CHANGES <input type="checkbox"/> UNSAT	<b>ARINC CODING:</b> <input type="checkbox"/> SAT <input checked="" type="checkbox"/> SAT/GOLD <input type="checkbox"/> UNSAT
<b>FLIGHT INSPECTOR SIGNATURE:</b> scott wiebe @ 08/31/2020 00:24			<b>PRINTED NAME:</b> WIEBE, GREGORY SCOTT	
			<b>NOTAM INITIATED?</b> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	

<b>FLIGHT INSPECTOR REMARKS:</b>		

<b>DME/DME STATUS:</b> <input type="checkbox"/> SAT <input type="checkbox"/> UNSAT	<b>SPECIALIST SIGNATURE:</b>	<b>PRINTED NAME:</b>
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<b>SPECIALIST REMARKS:</b>

## IN-FLIGHT OBSTACLE REPORT

<b>OBSTRUCTION ID #:</b>	<b>COORDINATES OR LOCATION:</b>	<b>GNSS ALTITUDE (MSL):</b>	<b>BAROMETRIC ALTITUDE (MSL):</b>	<b>HEIGHT ABOVE GROUND LEVEL:</b>

## **AFS APPROVAL SIGNED/COMPLETE (REC 09/08/2020)**

As part of the Flight Standards Official Distribution process for all Special Instrument Approach Procedures (IAPs), Waiver/Approval requests, defined in Flight Standards Quality Management Systems (QMS), Procedure Review Board (PRB) and FAA Order 8260.60, copies of the final signed procedures can be viewed at the links provided below:

### **1. Approval Request**

**CHICAGO O'HARE INTL, CHICAGO, IL, United States**

"WYNDE TWO (RNAV) STAR"

[A IL CHICAGO KORD WYNDE TWO \(RNAV\) STAR V2.pdf](#)

### **2. Approval Request**

**CHICAGO O'HARE INTL, CHICAGO, IL, United States**

"WATSN FOUR (RNAV) STAR"

[A IL CHICAGO KORD WATSN FOUR \(RNAV\) STAR V2.pdf](#)

### **3. Approval Request**

**CHICAGO O'HARE INTL, CHICAGO, IL, United States**

"VEECK FIVE (RNAV) STAR"

[A IL CHICAGO KORD VEECK FIVE \(RNAV\) STAR V2.pdf](#)

### **4. Approval Request**

**CHICAGO O'HARE INTL, CHICAGO, IL, United States**

"TRTLL (RNAV) SIX STAR"

[A IL CHICAGO KORD TRTLL SIX \(RNAV\) STAR V2.pdf](#)

### **5. Approval Request**

**CHICAGO O'HARE INTL, CHICAGO, IL, United States**

"SHAIN TWO (RNAV) STAR"

[A IL CHICAGO KORD SHAIN TWO \(RNAV\) STAR V2.pdf](#)

### **6. Approval Request**

**CHICAGO O'HARE INTL, CHICAGO, IL, United States**

"MADII SIX (RNAV) STAR"

[A IL CHICAGO KORD MADII SIX \(RNAV\) STAR V2.pdf](#)

### **7. Approval Request**

**CHICAGO O'HARE INTL, CHICAGO, IL, United States**

"FYTTE SIX (RNAV) STAR"

[A IL CHICAGO KORD FYTTE SIX \(RNAV\) STAR V2.pdf](#)

### **8. Approval Request**

**CHICAGO O'HARE INTL, CHICAGO, IL, United States**

"ESSPO FIVE (RNAV) STAR"

[A IL CHICAGO KORD ESSPO FIVE \(RNAV\) STAR V2.pdf](#)

### **9. Approval Request**

**CHICAGO O'HARE INTL, CHICAGO, IL, United States**

"BENKY SIX (RNAV) STAR"

[A IL CHICAGO KORD BENKY SIX \(RNAV\) STAR V2.pdf](#)

## PROCEDURE REVIEW BOARD (PRB) Results

August 27, 2020 (rec 08/31/2020)

**\*\*\*PRB recommendations do not constitute approval\*\*\***

5. **Approval Request** – Chicago O'Hare INTL, Chicago, IL (ORD) – TRTLL SIX (RNAV) STAR, <http://swims.faa.gov/PTR/Edit/8074>

Requested by: AJV-A

PRB Results: Recommend Approval





# Federal Aviation Administration

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## Memorandum

Date: February 28, 2020

To: Tom Lattimer, *Airspace Manager CSA PBN Team*

From: Al Qualiardi, *Chicago District Airspace & Procedures Manager*

Prepared by: Socrates Passialis, *Staff Support Specialist Chicago TRACON*

Subject: Letter of Approval (LOA) Request: TRTLL STAR, KORD

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The termination fixes for the TRTLL Standard Terminal Arrival Route (STAR) are HIMGO, TONIE, and RREGY.

Currently, FAAO 8260.3D, PARA 2-2-7f requires an altitude at the termination fix and that altitude must be at or above the minimum vectoring altitude (MVA) and/or minimum IFR altitude (MIA) (as applicable).

The current runway configuration at KORD determines the altitude assignments at the various fixes along the STAR. The TRTLL STAR serves multiple runway configurations and flows at KORD with varying altitude restrictions making a permanent altitude restriction impractical at HIMGO, TONIE, and RREGY. FAAO 7110.65 PARA 4-5-6 and 5-6-1 requires altitude assignments above the minimum IFR altitude / minimum vectoring altitude (MIA/MVA) so the absence of an altitude does not introduce any new risk into the system.

Therefore, the Chicago District is requesting a Letter of Approval (LOA) to continue to utilize HIMGO, TONIE, and RREGY for the TRTLL STAR without published or mandatory altitudes.

Sincerely,

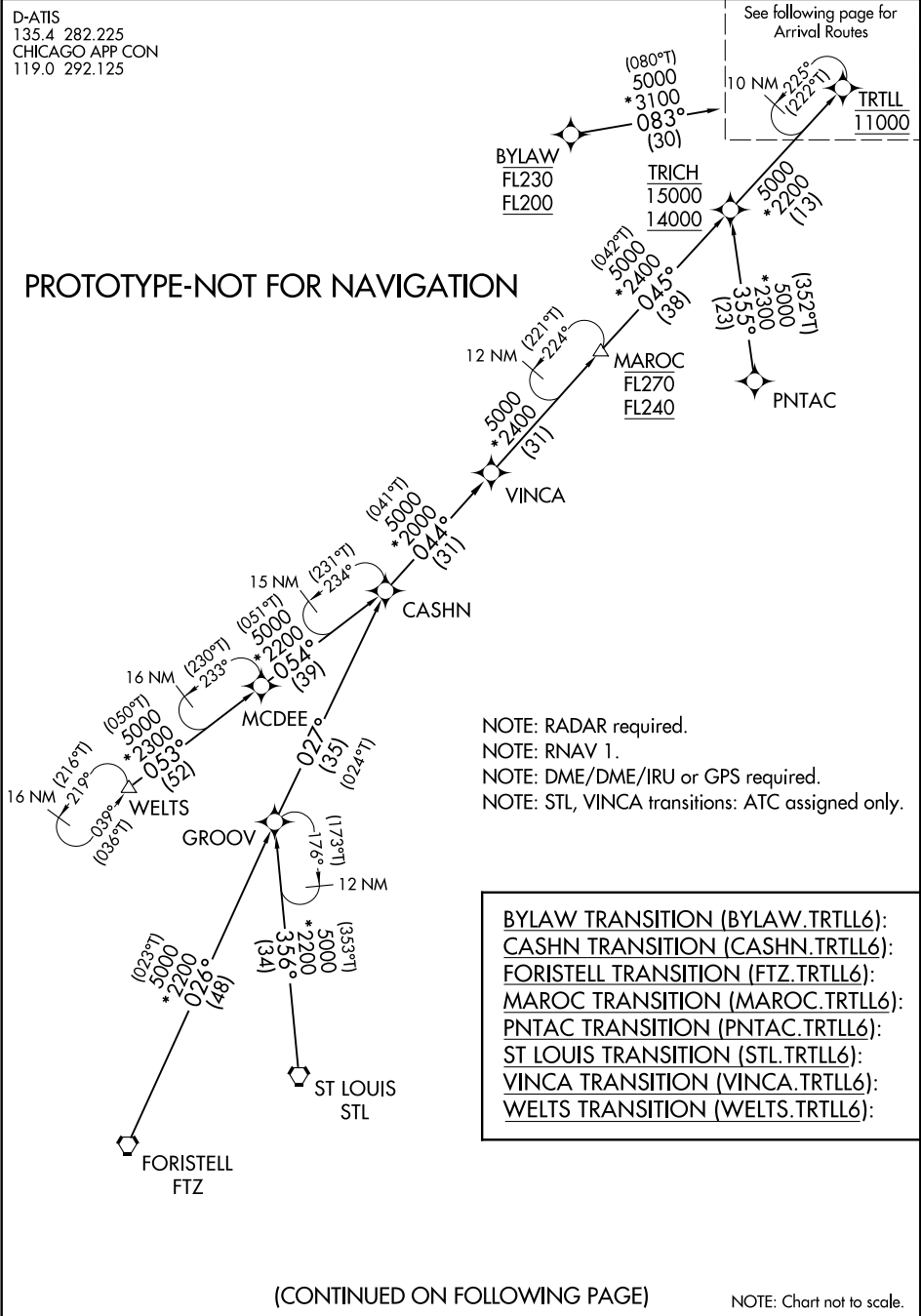
A handwritten signature in black ink, appearing to read "Al Qualiardi", is written over a horizontal line.

Al Qualiardi

D-ATIS  
135.4 282.225  
CHICAGO APP CON  
119.0 292.125

See following page for  
Arrival Routes

PROTOTYPE-NOT FOR NAVIGATION



## ARRIVAL ROUTE DESCRIPTION

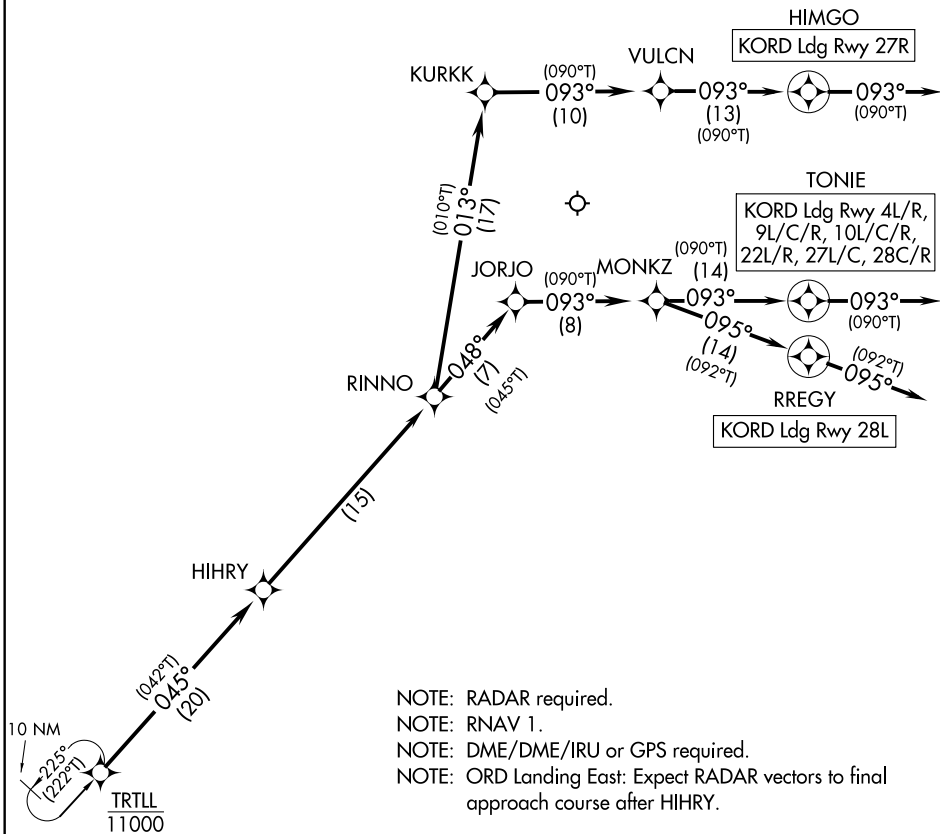
From TRTLL on track 045° to HHHRY, then on track 045° to RINNO.  
LANDING RWYS 4L/R, 9L/C/R, 10L/C/R, 22L/R, 27L/C, 28C/R:  
From RINNO on track 048° to JORJO, then on track 093° to MONKZ,  
then on track 093° to TONIE, then on track 093°. Expect RADAR vectors  
to final approach course.

**LANDING RWY 27R:** From RINNO on track 013° to KURKK, then on track 093° to VULCN, then on track 093° to HIMGO, then on track 093°. Expect RADAR vectors to final approach course.

**LANDING RWY 28L:** From RINNO on track 048° to JORJO, then on track 093° to MONKZ, then on track 095° to RREGY, then on track 095°. Expect RADAR vectors to final approach course.

D-ATIS  
135.4 282.225  
CHICAGO APP CON  
119.0 292.125

PROTOTYPE-NOT FOR NAVIGATION



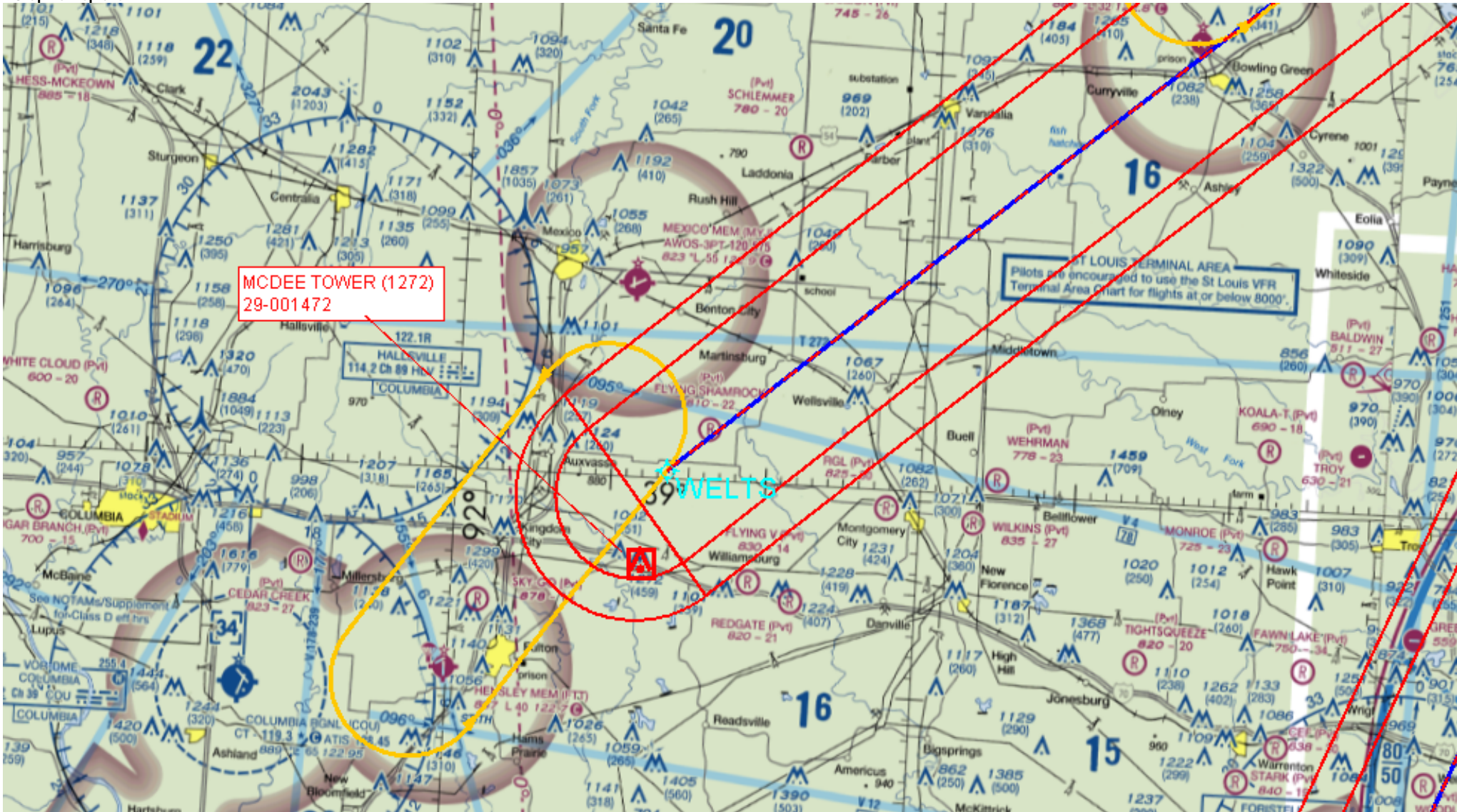
NOTE: Chart not to scale.

FEDERAL AVIATION ADMINISTRATION  
FLIGHT STANDARDS SERVICE  
STANDARD TERMINAL ARRIVAL (STAR)

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated. Distances are in nautical miles (NM). Graphic depictions attached.

Arrival Name	Number	STAR Computer Code	Superseded Number	Dated	Effective Date
TRTLL (RNAV)	SIX	TRTLL.TRLL6	FIVE	1/03/2019	

Graphic Depiction 2





FEDERAL AVIATION ADMINISTRATION  
FLIGHT STANDARDS SERVICE  
STANDARD TERMINAL ARRIVAL (STAR)

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated. Distances are in nautical miles (NM). Graphic depictions attached.

Arrival Name	Number	STAR Computer Code	Superseded Number	Dated	Effective Date
TRTLL (RNAV)	SIX	TRTLL.TRLL6	FIVE	1/03/2019	

Graphic Depiction 3





Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated. Distances are in nautical miles (NM). Graphic depictions attached.

GROOV TERRAIN+AAO (1132)  
TP2739\_FTZ

GROOV TOWER (1150)  
17-001582



FEDERAL AVIATION ADMINISTRATION  
FLIGHT STANDARDS SERVICE  
STANDARD TERMINAL ARRIVAL (STAR)

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated. Distances are in nautical miles (NM). Graphic depictions attached.

Arrival Name	Number	STAR Computer Code	Superseded Number	Dated	Effective Date
TRTLL (RNAV)	SIX	TRTLL.TRTLL6	FIVE	1/03/2019	

Graphic Depiction 5





FEDERAL AVIATION ADMINISTRATION  
FLIGHT STANDARDS SERVICE  
STANDARD TERMINAL ARRIVAL (STAR)

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated.  
Distances are in nautical miles (NM). Graphic depictions attached.

Arrival Name	Number	STAR Computer Code	Superseded Number	Dated	Effective Date
TRTLL (RNAV)	SIX	TRTLL.TRTLL6	FIVE	1/03/2019	

Graphic Depiction 6





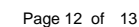
Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated.  
Distances are in nautical miles (NM). Graphic depictions attached.



Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated. Distances are in nautical miles (NM). Graphic depictions attached.

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated. Distances are in nautical miles (NM). Graphic depictions attached.

### Graphic Depiction 8



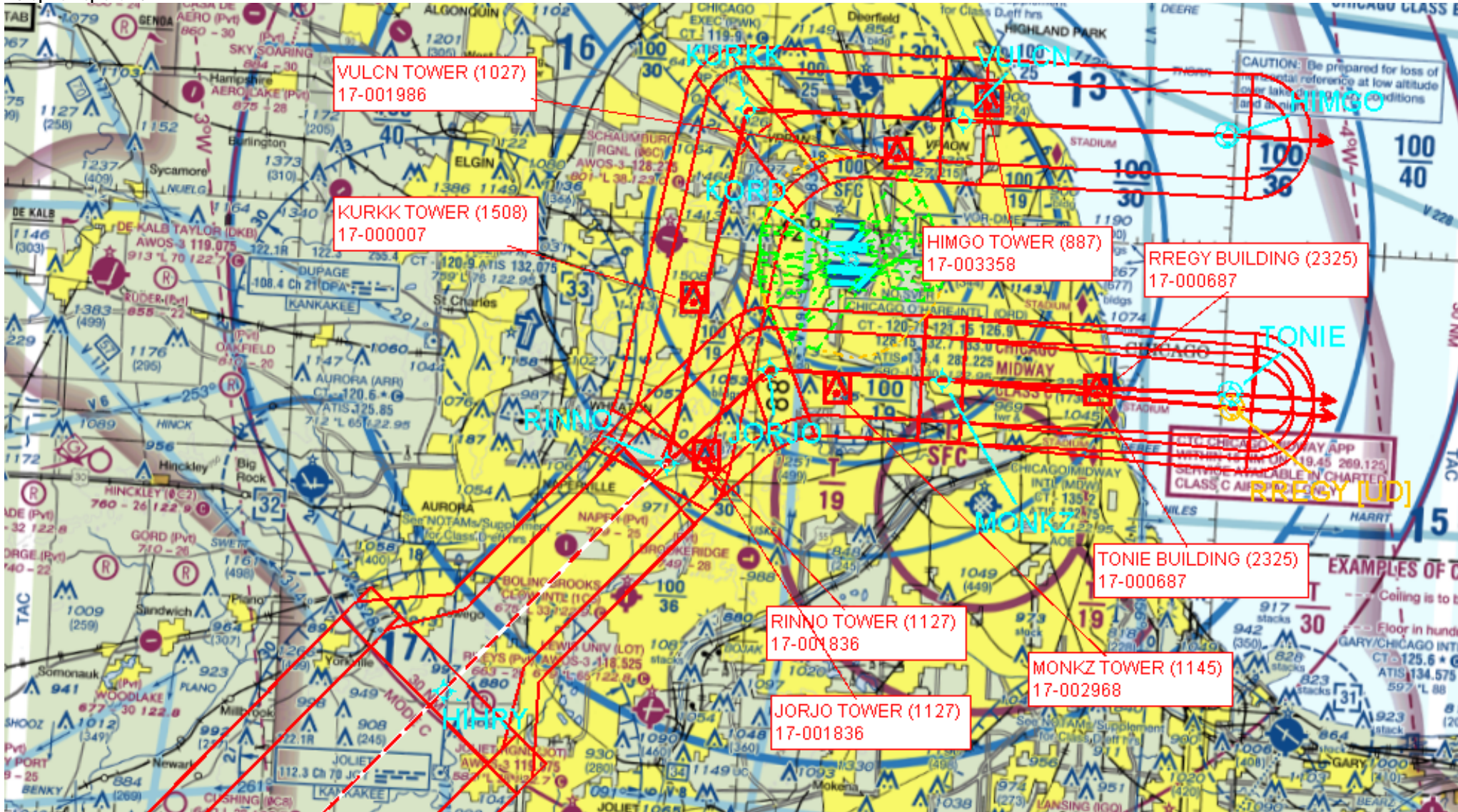


FEDERAL AVIATION ADMINISTRATION  
FLIGHT STANDARDS SERVICE  
STANDARD TERMINAL ARRIVAL (STAR)

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated. Distances are in nautical miles (NM). Graphic depictions attached.

Arrival Name	Number	STAR Computer Code	Superseded Number	Dated	Effective Date
TRTLL (RNAV)	SIX	TRTLL.TRLL6	FIVE	1/03/2019	

Graphic Depiction 9



(TRTLL.TRTLL5) 19003

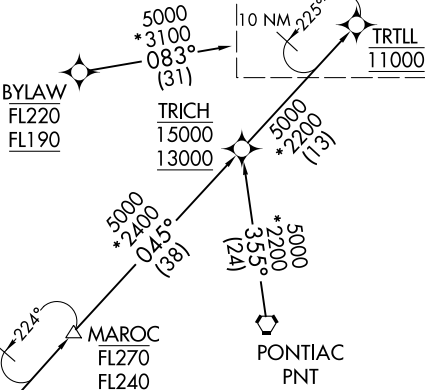
AL-166 (FAA)

TRTLL FIVE ARRIVAL (RNAV) Transition Routes

CHICAGO O'HARE INTL (ORD)  
CHICAGO, ILLINOIS

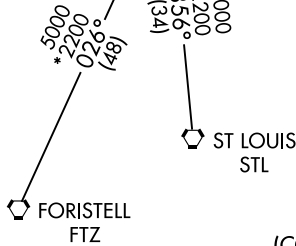
D-ATIS  
135.4 282.225  
CHICAGO APP CON  
119.0 292.125

See following page for  
Arrival Routes



NOTE: RADAR required.  
NOTE: RNAV 1.  
NOTE: DME/DME/IRU or GPS required.  
NOTE: STL transition: ATC assigned only.

BYLAW TRANSITION (BYLAW.TRTLL5):  
CASHN TRANSITION (CASHN.TRTLL5):  
FORISTELL TRANSITION (FTZ.TRTLL5):  
MAROC TRANSITION (MAROC.TRTLL5):  
PONTIAC TRANSITION (PNT.TRTLL5):  
ST LOUIS TRANSITION (STL.TRTLL5):  
WELTS TRANSITION (WELTS.TRTLL5):



(CONTINUED ON FOLLOWING PAGE)

NOTE: Chart not to scale.

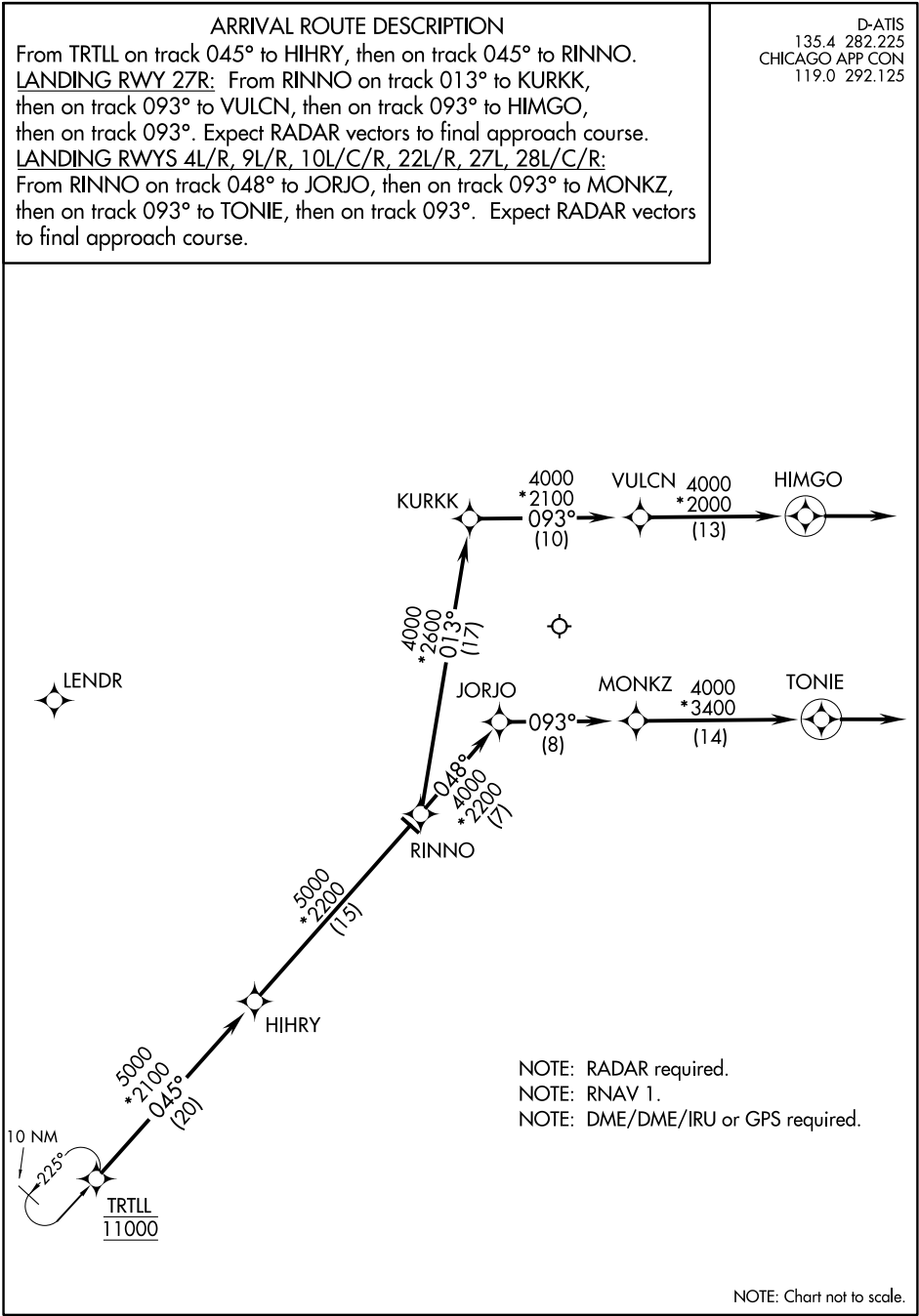
TRTLL FIVE ARRIVAL (RNAV) Transition Routes

(TRTLL.TRTLL5) 03JAN19

CHICAGO, ILLINOIS  
CHICAGO O'HARE INTL (ORD)

EC-3, 21 MAY 2020 to 18 JUN 2020

EC-3, 21 MAY 2020 to 18 JUN 2020







# Federal Aviation Administration

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## Memorandum to File

Date: July 8, 2020

From: Amy Hanson, Environmental Protection Specialist, CHI-ADO

Nan Terry, Environmental Specialist, CSA, OSG

To: File

Subject: Evaluation of Modifications of Standard Terminal Arrival Routes into Chicago O'Hare International Airport proposed for charting on November 5, 2020

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FAA proposes slight changes in the existing Standard Terminal Arrival Routes (STARs) supporting Chicago O'Hare International Airport (ORD). With the upcoming opening of the Runway 9C/27C in November 2020, FAA proposes minor changes in STARs associated with that runway. The FAA also proposes minor changes for STARs associated with other runways at ORD.

The O'Hare Modernization Program (OMP) Environmental Impact Statement (EIS) and Record of Decision (ROD) include the environmental disclosure and determination for the runway and for the arrival and departure procedures associated with all STARs for ORD.

Exhibit 1 shows each proposed change for STARs. STARs can service one or more airports in a geographical area, and may contain specific routings to individual runways.

### CHANGES ASSOCIATED WITH RUNWAY 9C/27C

FAA proposes to add Runway 9C/27C to each of the STARs, which is consistent with the contents of the 2005 OMP EIS, 2015 Written Re-Evaluation of OMP EIS, and 2019 Written Re-Evaluation of the OMP EIS.

Air Traffic proposes to align the inbound STARs with the downwind closest to the STAR instead of flying over the airport on a different STAR. Air Traffic proposes these changes to more efficiently and more safely control air traffic in the Chicago area. That means that most of the time, 9C and 27C arrivals would come from the south, instead of the north.

The attached graphics entitled "9C Overlay Area" and "27C Overlay Area" depict traffic already occurring in the orange highlighted area from the north, so switching 9C arrivals to the south (instead of the north) will be insignificant.

### CHANGES ASSOCIATED WITH OTHER RUNWAYS AND STARs

The majority of the proposed changes are in the enroute structure above Flight Level 180, which is 18,000 feet above Mean Sea Level. Ground level at ORD is @ 660 feet above Mean Sea Level. Air Traffic is proposing several changes from the STARs to the final approach courses for Runways 10L/28R and 10C/28C. Most of these proposed changes already occur today with the ability of air traffic controllers to vector aircraft. Some changes are proposed to put these vectors into procedures to decrease conversation between pilot and air traffic controllers. Decreasing the amount of conversations makes operations safer. Air Traffic proposes these changes to more efficiently and more safely control air traffic in the Chicago area.

Based upon a review of this proposal, a review of existing and proposed flight tracks, FAA has determined that there are no substantial changes in the proposed action that are relevant to environmental concerns, the data and analysis contained in the previous EIS are still substantially valid, and there are no significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.

Accordingly the contents of the previously prepared 2005 OMP EIS, 2015 Written Re-Evaluation of OMP EIS, and 2019 Written Re-Evaluation of the OMP EIS remain valid and no further action is needed.

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CHI-ADO Representative

**NAN L TERRY**

Digitally signed by NAN L TERRY  
Date: 2020.07.08 16:50:01 -05'00'

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Air Traffic Organization Central Service Area Representative

Exhibit 1

Graphics of each STAR

9C Overlay Area

27C Overlay Area